Report for 2002TX59B: Reduced Phosphorus Concentrations in Feedlot Manure and Runoff

There are no reported publications resulting from this project.

Report Follows:

Reduced Phosphorus Concentrations in Feedlot Manure and Runoff

Progress Report
By
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A beef cattle feeding trial was conducted at the TAES/ USDA-ARS experimental feedyard, at Bushland, Texas. The feeding trial focused on the reduction of phosphorus in the cattle diet to reduce the concentration of phosphorus in the excreted manure. The 188 cattle were fed 4 different diets with varying levels of phosphorus in 18 feed pens from June-December 2002. Each feed pen measured 6m x 27m (162m2). Surfaces for 12 of the feed pens consisted of compacted fly ash, and the remaining 6 pen surfaces were native soil.

Water samples were collected from 6 different rain events that produced sufficient runoff from the pen surfaces. Water samples were collected with an ISCO 3700 that was activated automatically by runoff waters. Each sampler is capable of collecting 24 samples with each sample containing 1000 ml. Water samples were collected at 5 minute intervals until all 24 bottles were filled or runoff levels were not sufficient to trigger the sampler.

Due to the large volume of water samples (500+) results are still pending.